

Title (en)

METHODS AND APPARATUS FOR DEPTH ENCODING AND DECODING

Title (de)

VERFAHREN UND VORRICHTUNG ZUR TIEFENCODIERUNG UND -DECODIERUNG

Title (fr)

PROCÉDÉS ET APPAREIL DE CODAGE ET DE DÉCODAGE DE PROFONDEUR

Publication

EP 3777154 A1 20210217 (EN)

Application

EP 19718049 A 20190409

Priority

- EP 18305462 A 20180413
- US 2019026433 W 20190409

Abstract (en)

[origin: EP3554074A1] Methods and device for encoding/decoding data representative of depth of a 3D scene. To reach that aim, the depth data is quantized to obtain a number of quantized depth values greater than a number of encoding values allowed by a determined encoding bit depth. For each block of first pixels of a picture comprising the depth data, a first set of candidate quantization parameters representative of each range of quantized depth values comprised in said each block of first pixels is determined, the first set being determined according to the number of encoding values. A second set of quantization parameters is determined as a subset of the union of the first sets, the second set comprising candidate quantization parameters common to a plurality of blocks of first pixels of the picture, one or more quantization parameters of the second set being associated with each block of first pixels of the picture. The second set of quantization parameters is encoded, and the quantized depth values are encoded according to the quantization parameters.

IPC 8 full level

H04N 19/126 (2014.01); **H04N 19/154** (2014.01); **H04N 19/176** (2014.01); **H04N 19/463** (2014.01); **H04N 19/597** (2014.01); **H04N 19/98** (2014.01)

CPC (source: EP US)

H04N 19/124 (2014.11 - US); **H04N 19/126** (2014.11 - EP); **H04N 19/154** (2014.11 - EP); **H04N 19/176** (2014.11 - EP US); **H04N 19/179** (2014.11 - US); **H04N 19/463** (2014.11 - EP); **H04N 19/597** (2014.11 - EP US); **H04N 19/98** (2014.11 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3554074 A1 20191016; CN 112219398 A 20210112; CN 112219398 B 20231205; EP 3777154 A1 20210217; JP 2021521678 A 20210826; JP 7445601 B2 20240307; US 11671596 B2 20230606; US 2021385454 A1 20211209; WO 2019199714 A1 20191017

DOCDB simple family (application)

EP 18305462 A 20180413; CN 201980036964 A 20190409; EP 19718049 A 20190409; JP 2020555057 A 20190409; US 2019026433 W 20190409; US 201917047251 A 20190409